

A B C D E F G H I J

Fig. 1C

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Fig. 1D

Fig. 2

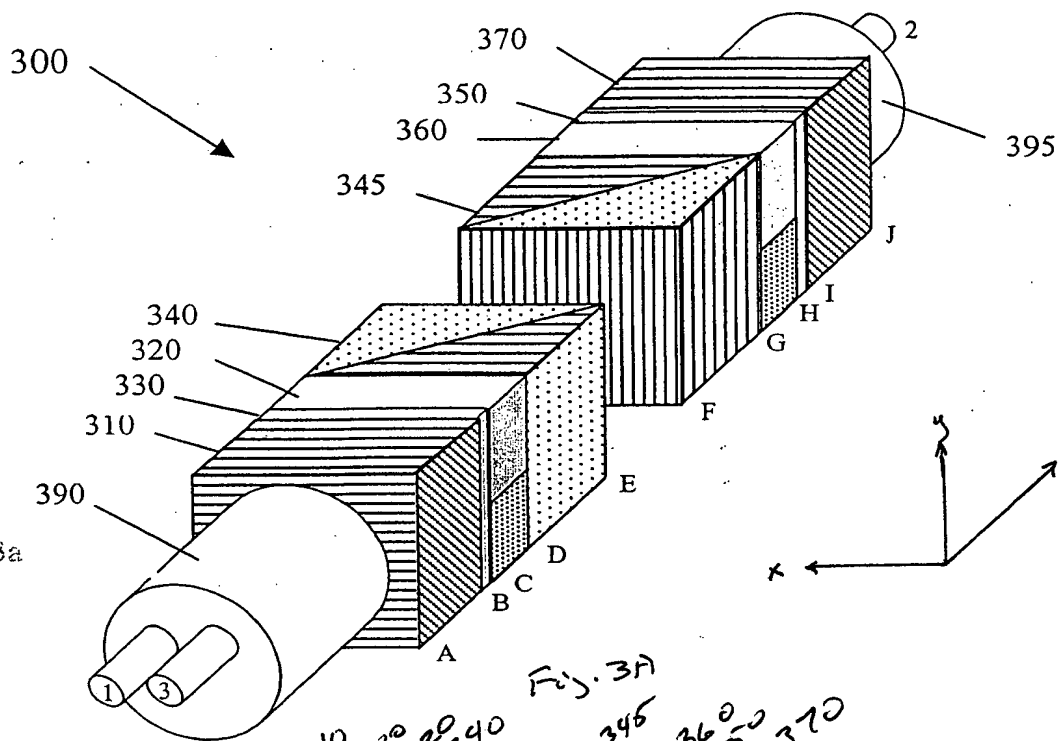


Figure 3a

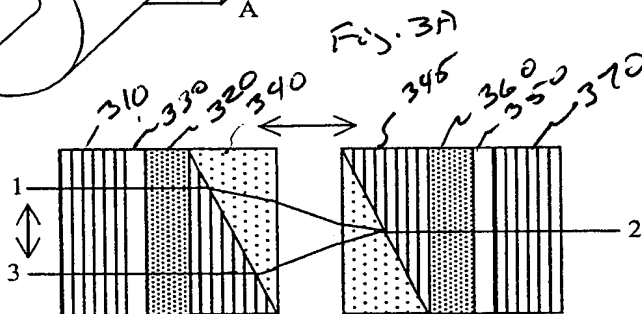


Figure 3b (top)

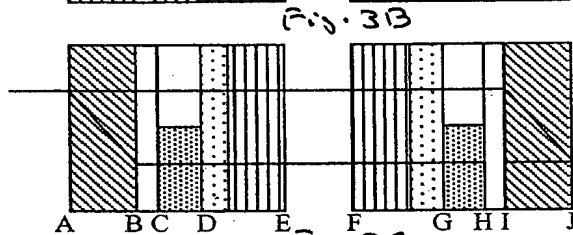


Figure 3c (side)

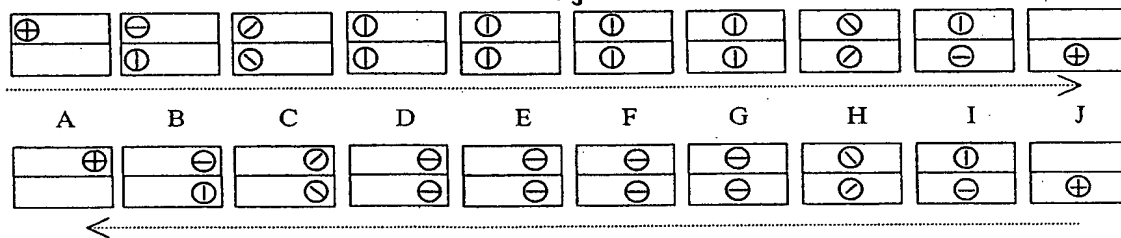


Fig. 3d

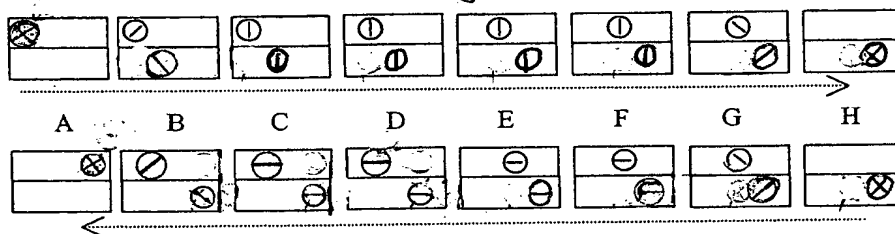
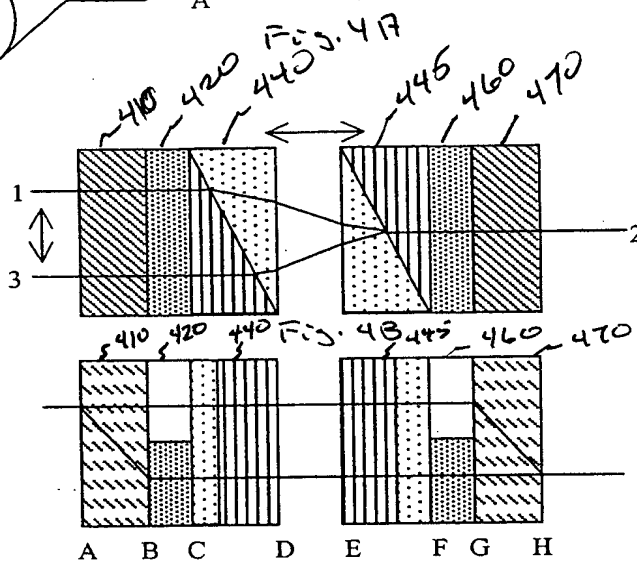
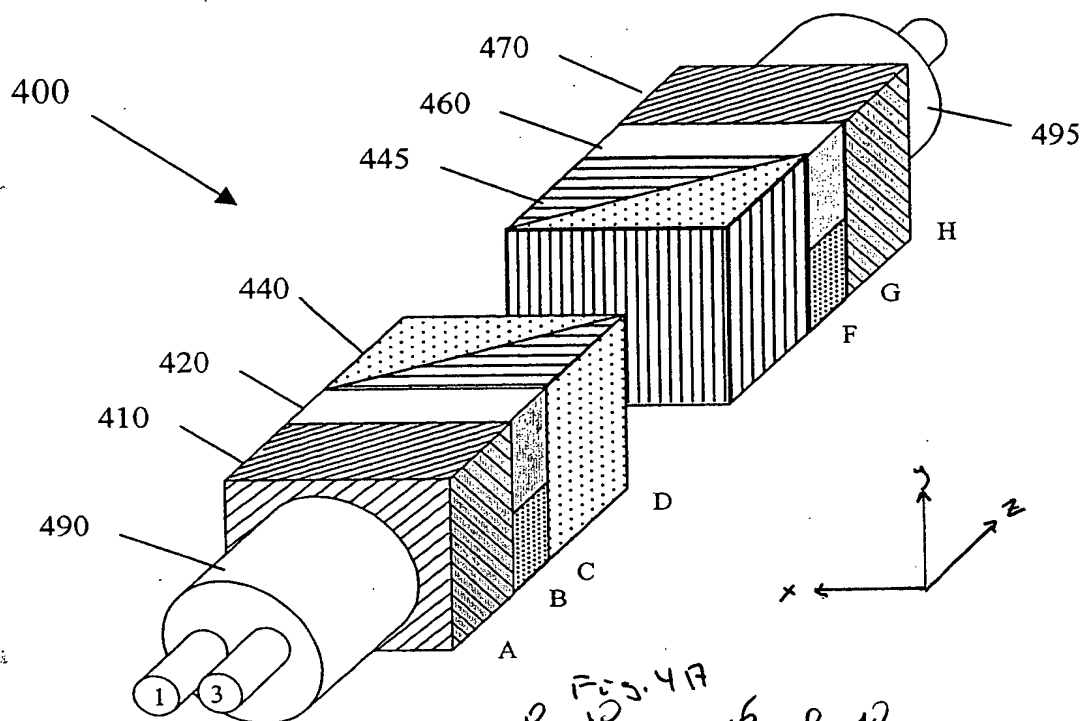


Fig. 4D

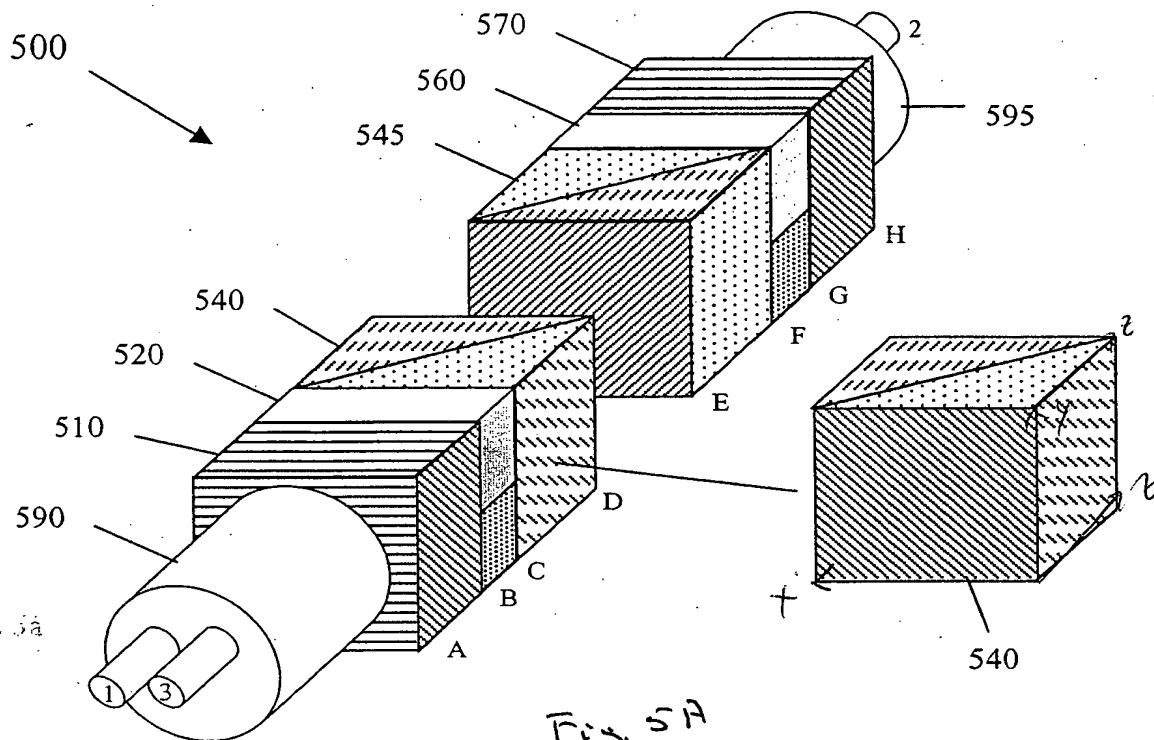


Figure 5a

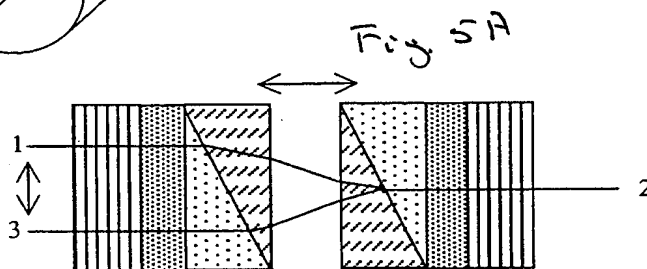


Figure 5b (top)

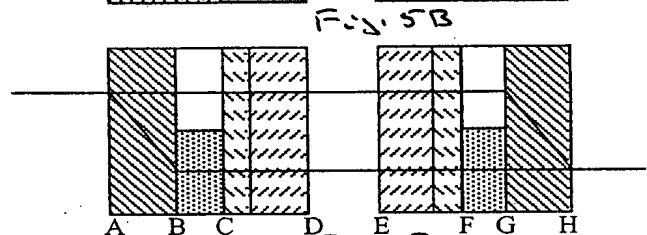


Figure 5c (side)

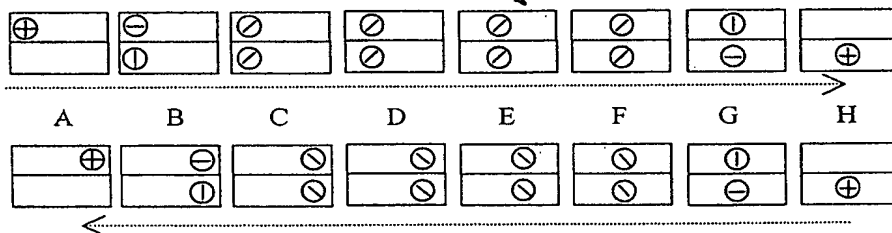
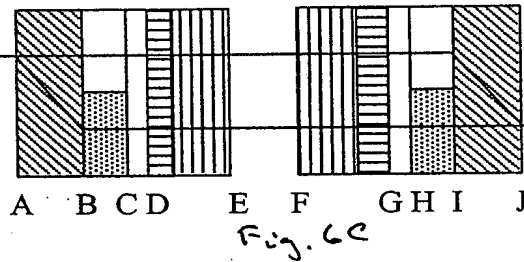
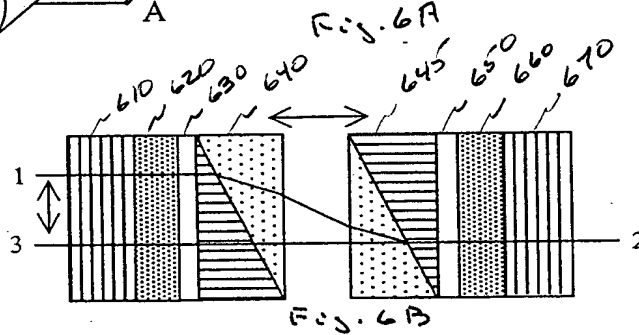
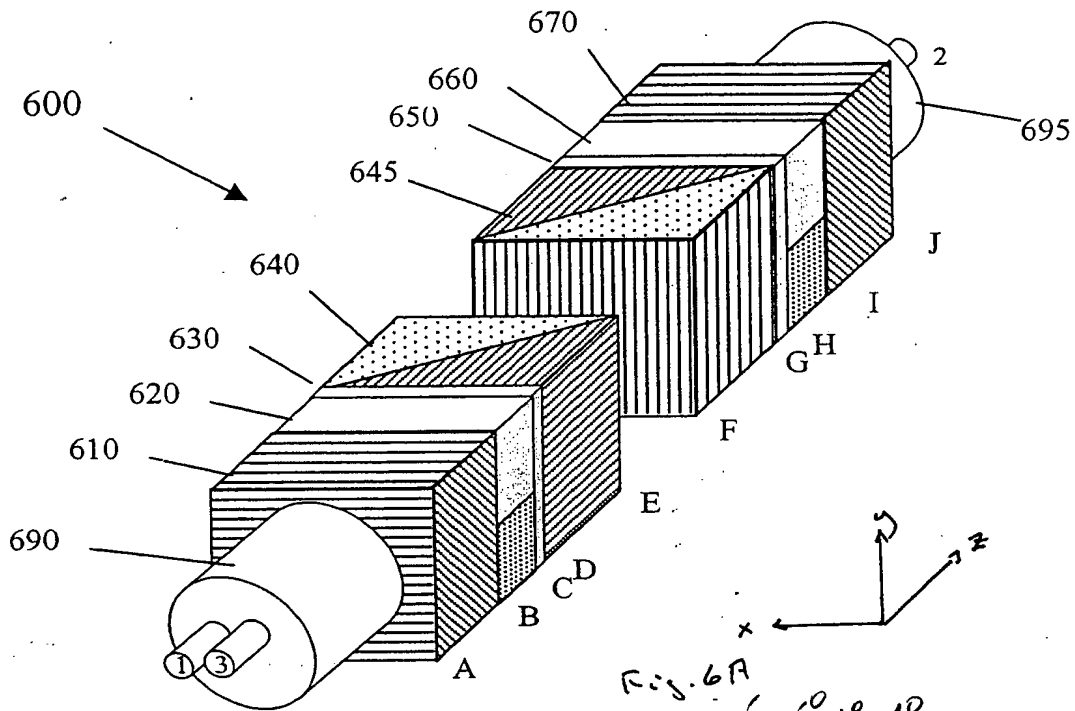


Figure 5d

Fig. 5d



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Fig. 6D

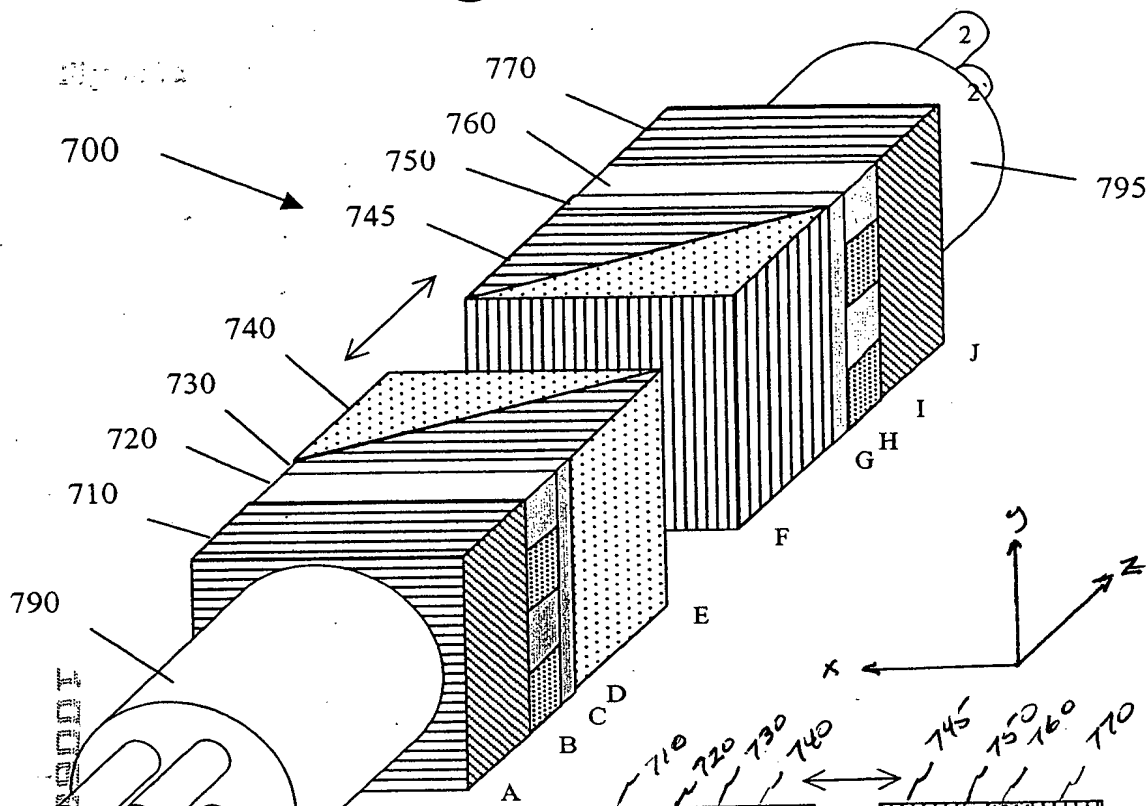


Fig. 7A

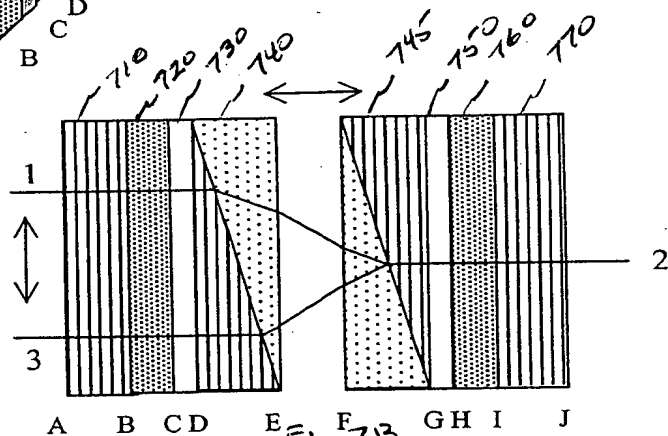


Fig. 7B

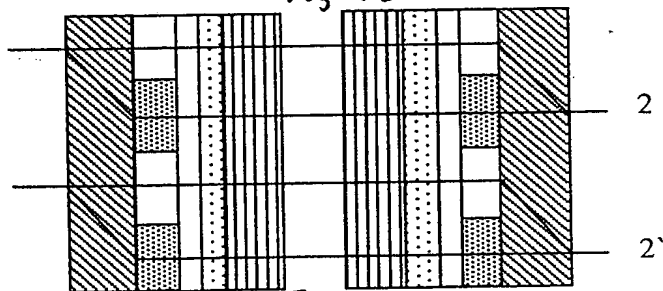


Fig. 7C

⊕	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕
⊕	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕
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A	B	C	D	E	F	G	H	I	J

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⊕	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕
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A	B	C	D	E	F	G	H	I	J

Fig. 7D

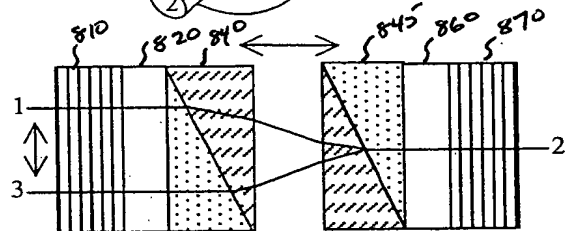
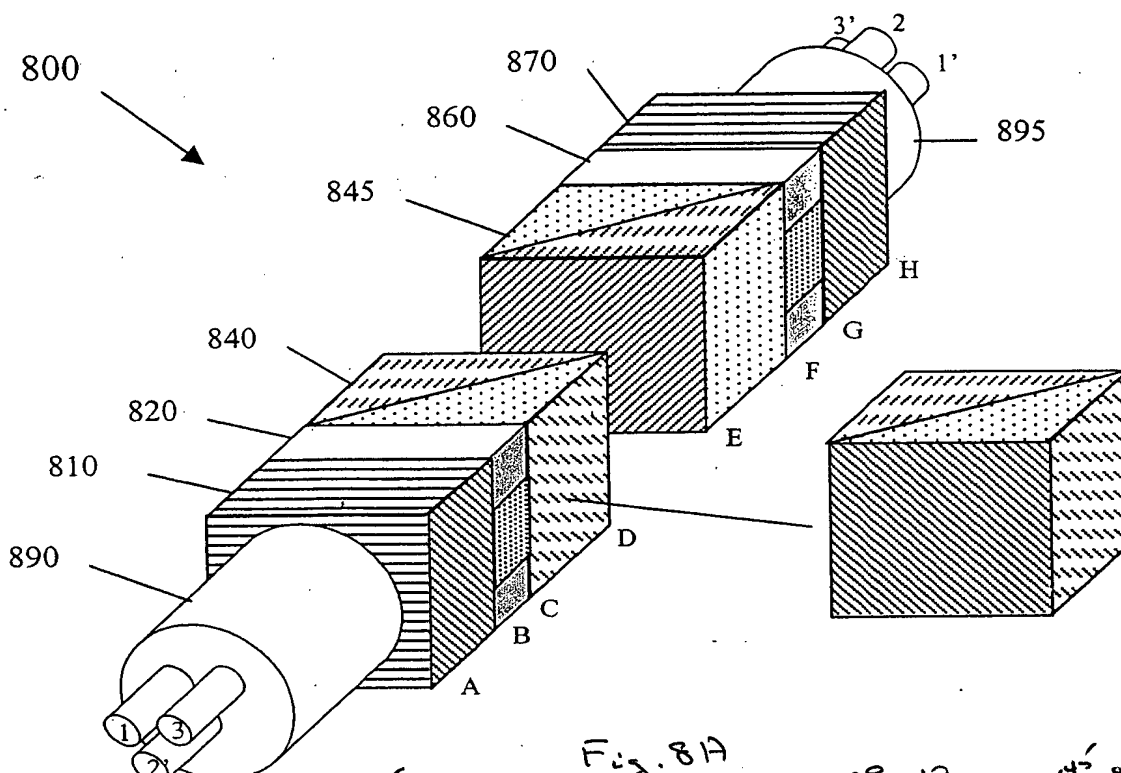


Fig. 8B (top)

Fig. 8A

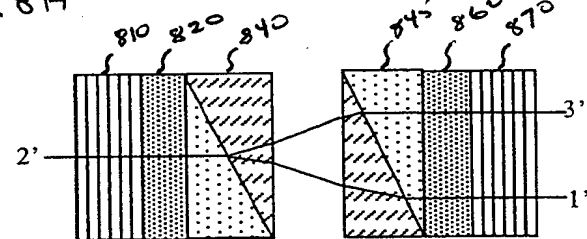


Fig. 8C (top)

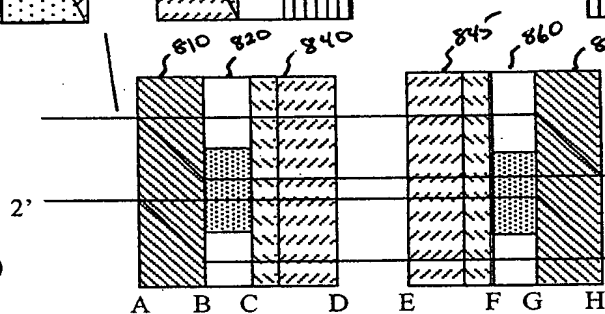


Fig. 8D (side)

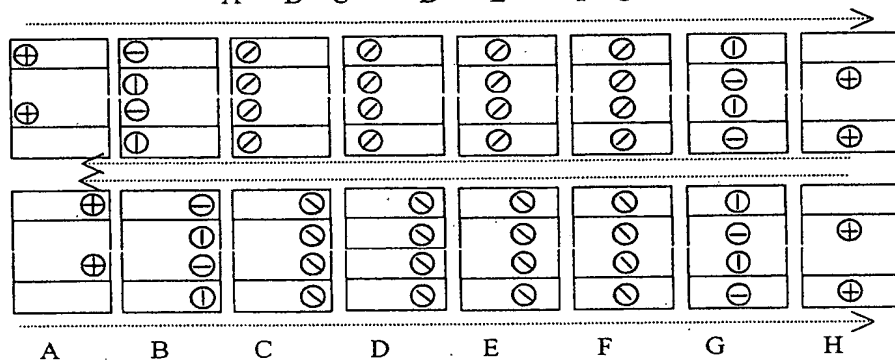
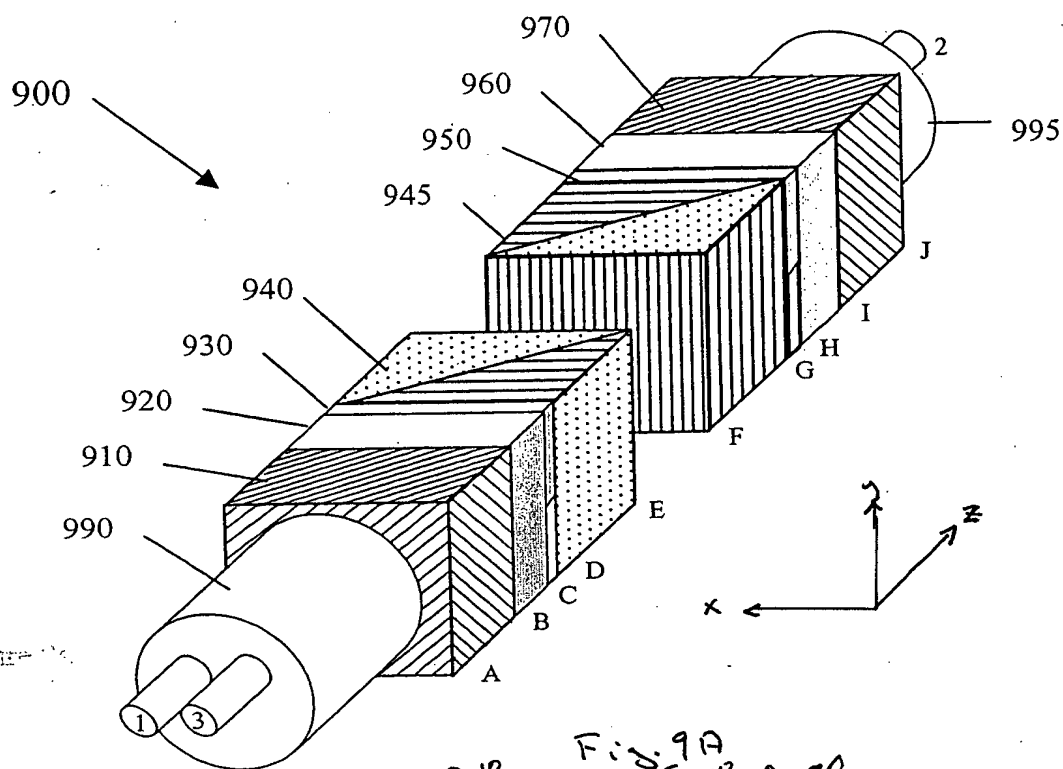


Fig. 8E



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Figure 9

Figure 9a (top)

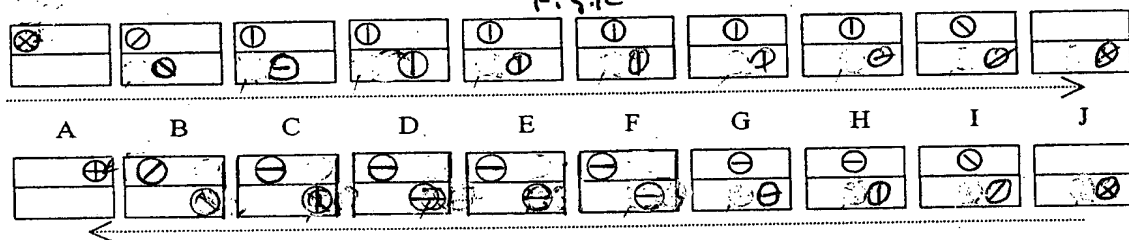
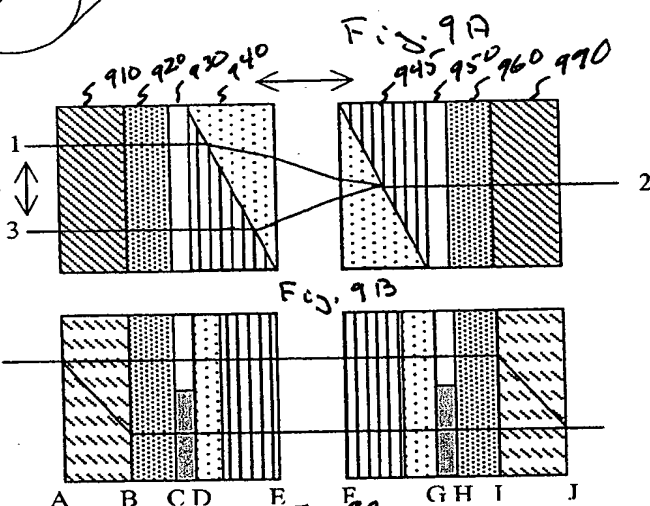


Fig. 9D

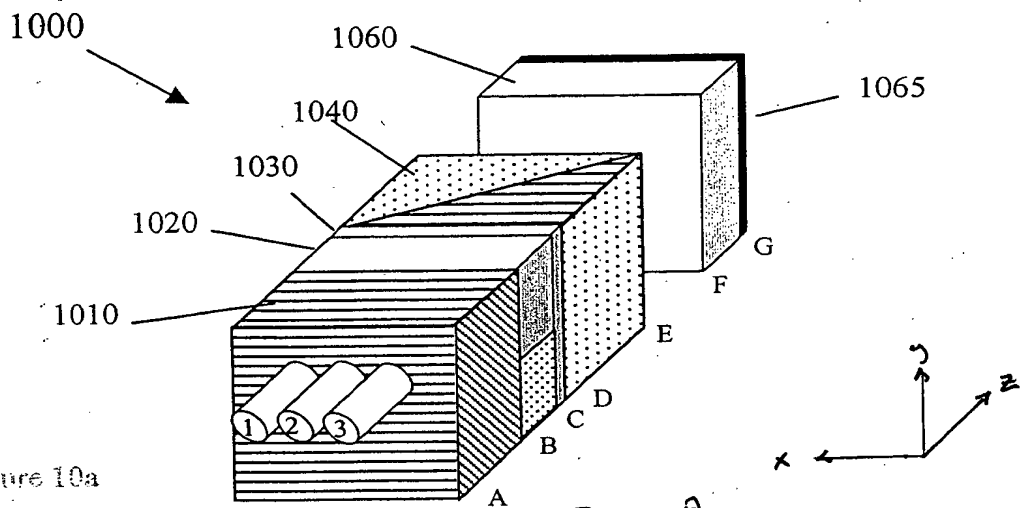


Figure 10a

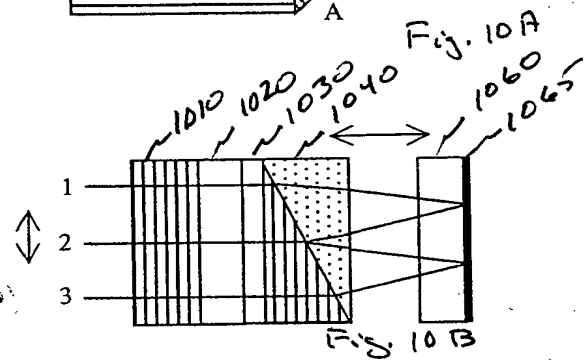


Figure 10b (top)

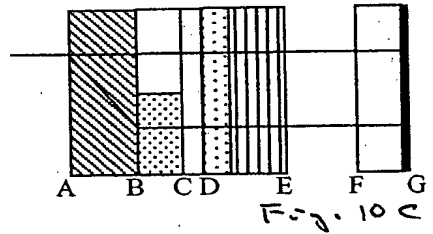


Figure 10c (bottom)

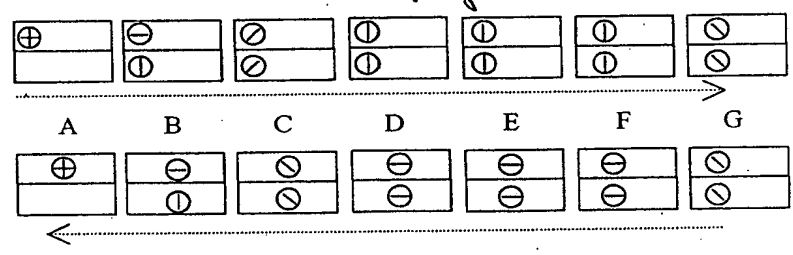


Fig. 10 D

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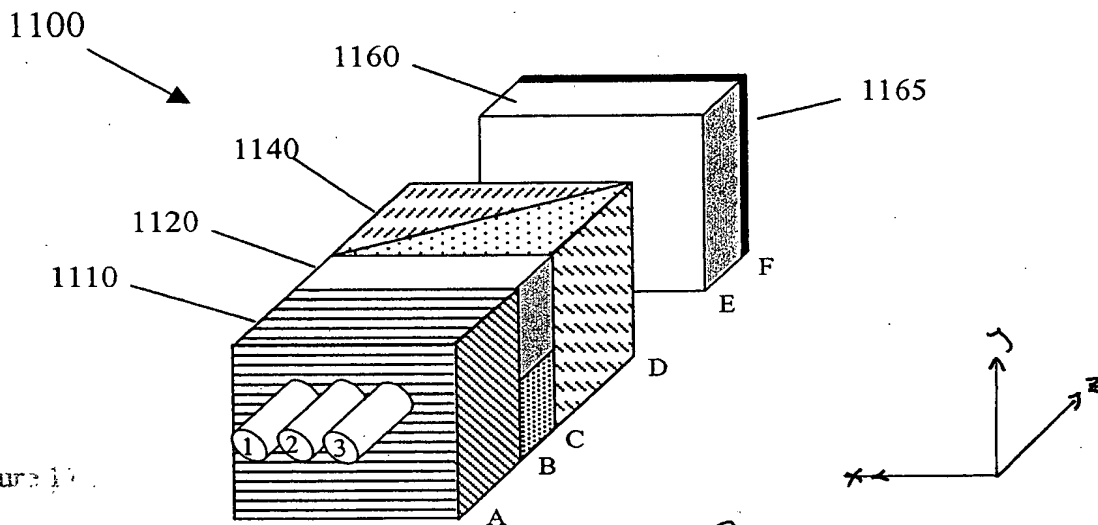


Figure 11

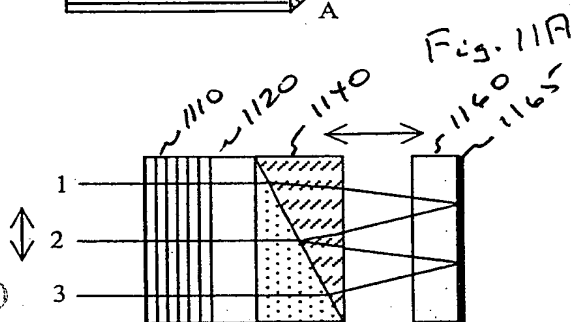


Fig. 11A

Figure 11 (top)

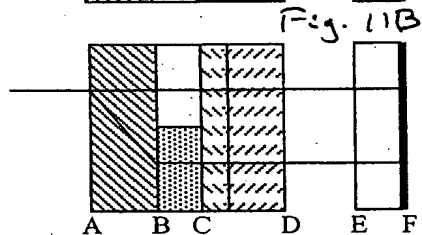


Fig. 11B

Figure 11 (side)

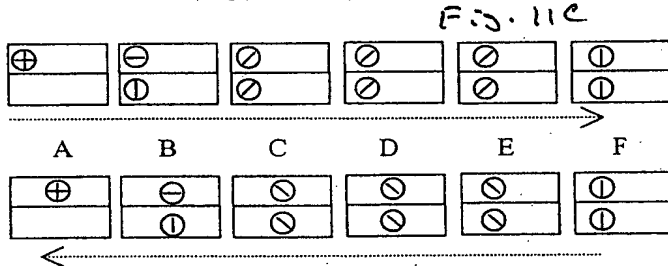
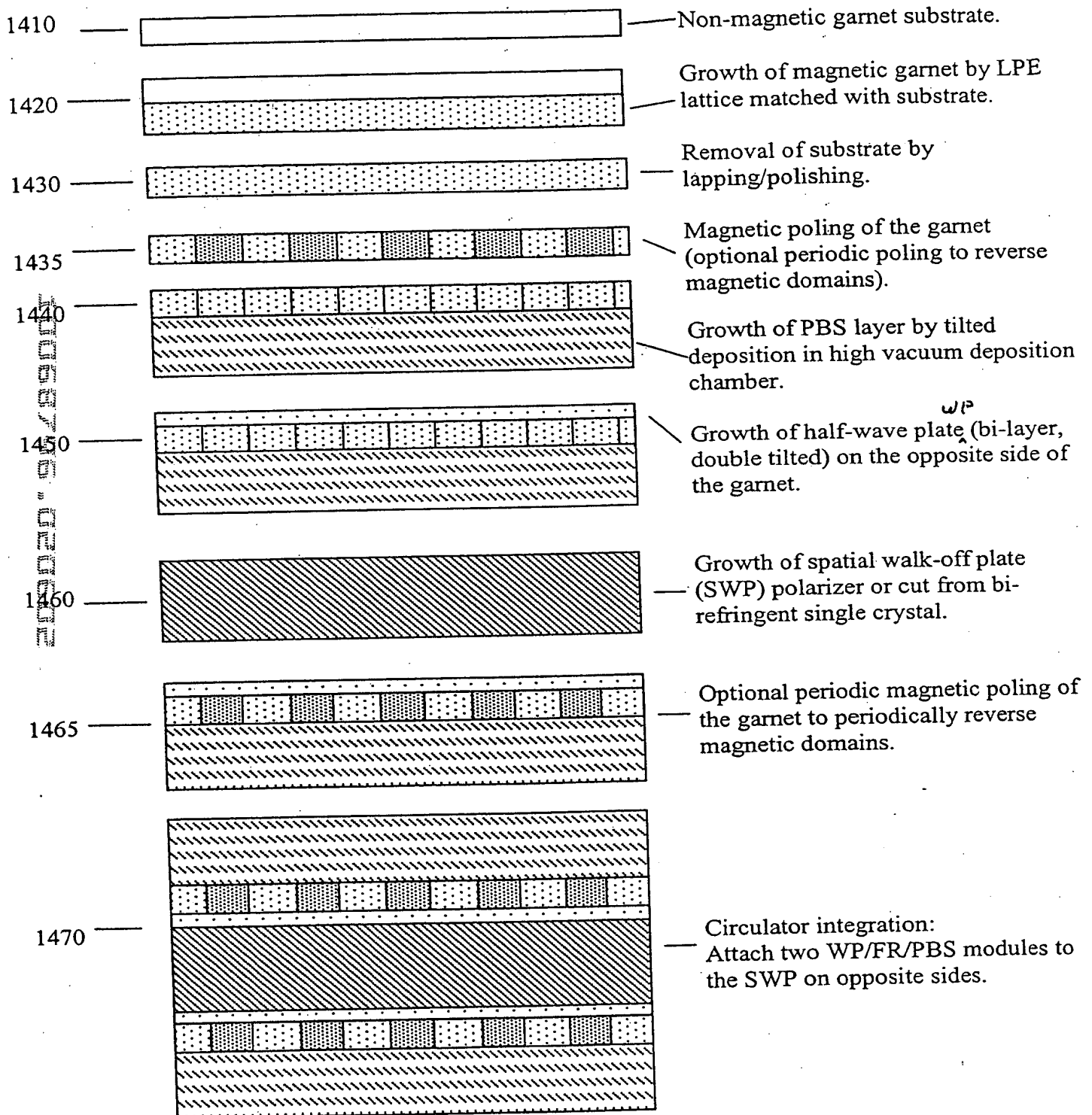


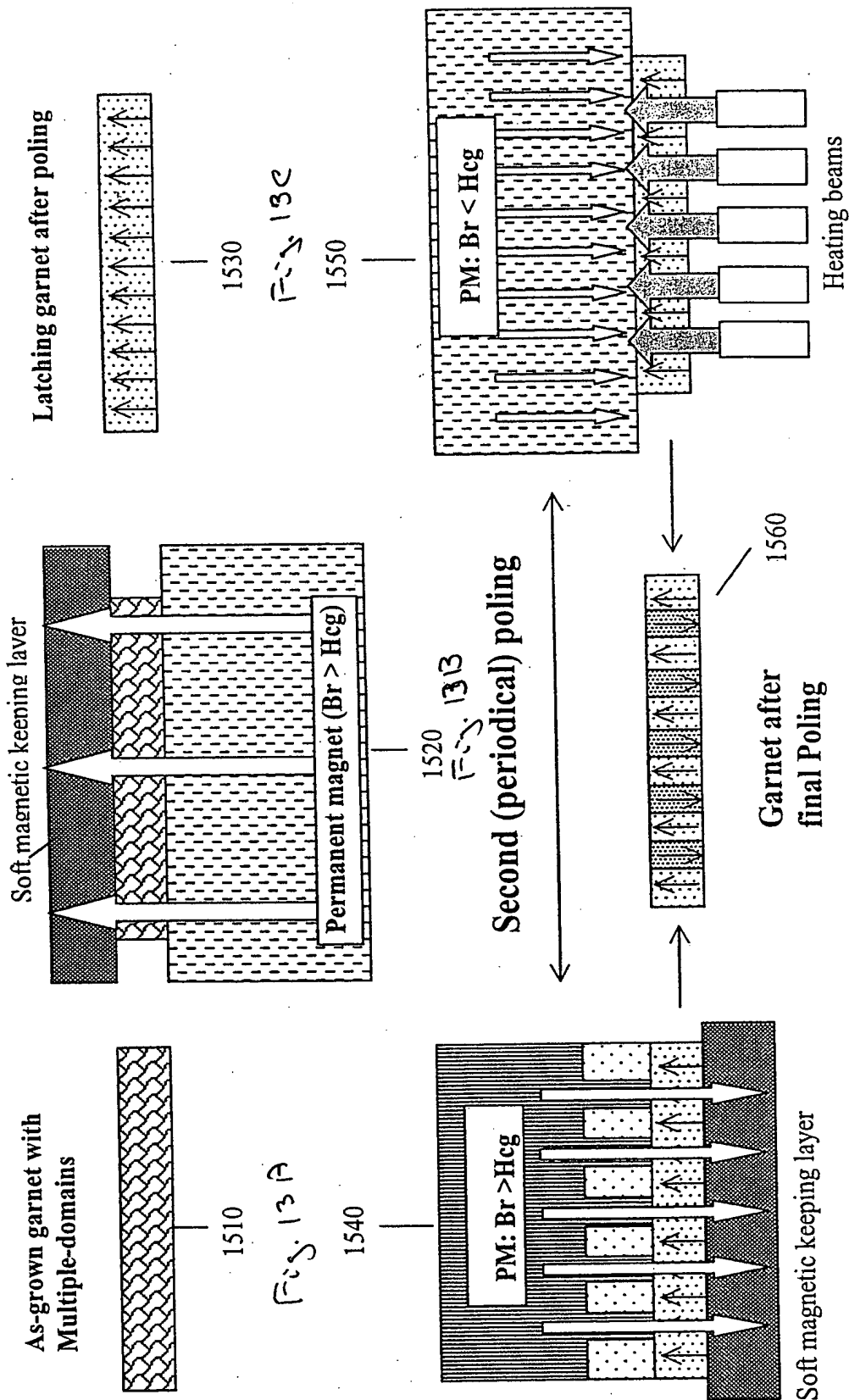
Fig. 11C

Fig. 11D

Fabrication Process of a Circulator Array



Initial poling in high field



Cold poling: Only those domains contacting the magnetic tips are magnetically reversed.

Fig. 13D

Fig. 13E

Hot poling: Only those domains illuminated by the heating beams are magnetically reversed.

Fig. 13F

Magnetic (Periodic) Poling of Faraday Rotator

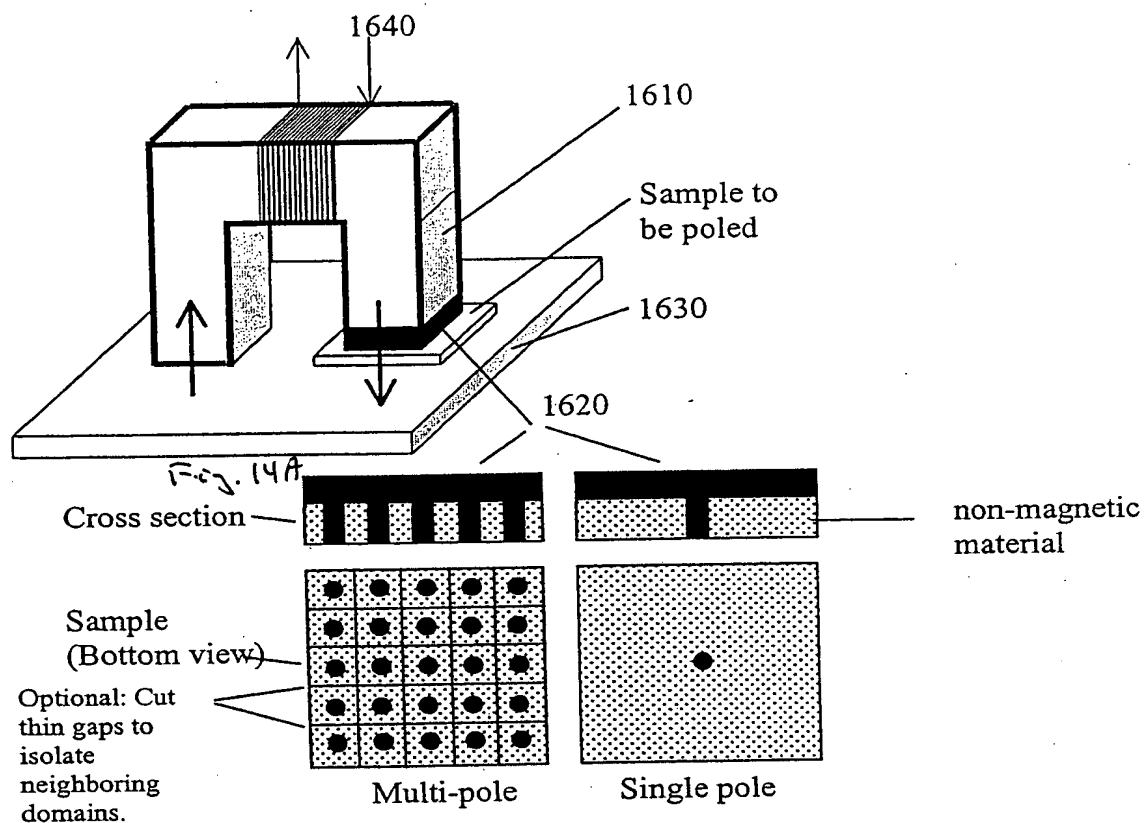
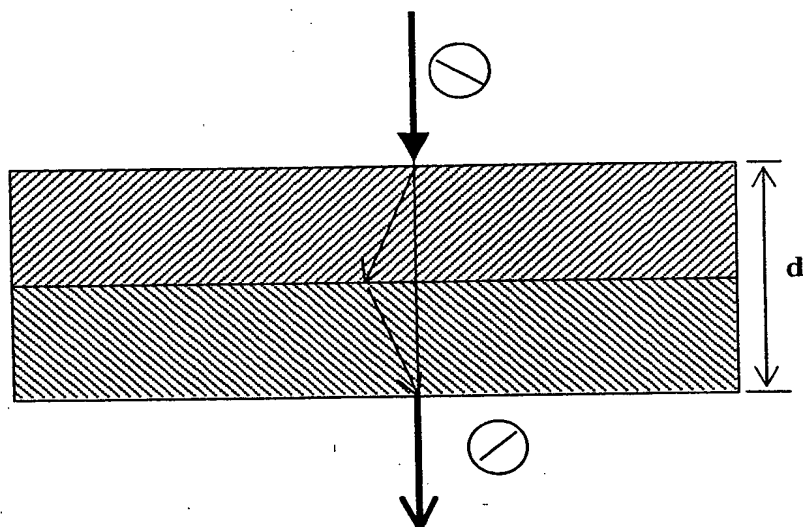


Fig. 14B

Fig. 14C

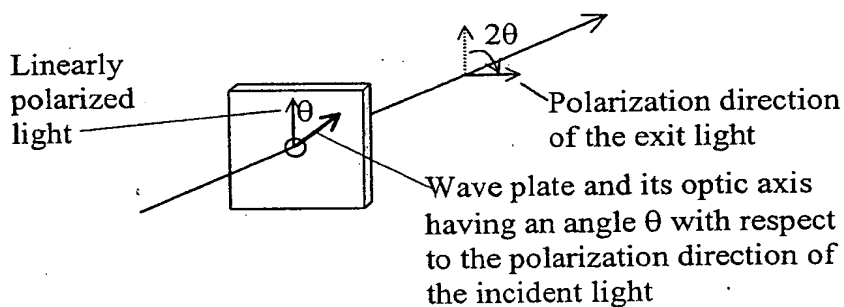
1006736.020603



Waveplate from bi-directionally obliquely deposited films

Half wave plate : $\Delta n \cdot d = \lambda/2$

The half-wave plate is capable of rotating a linearly polarized light by 2θ (where θ is the direction of polarization with respect to the optical axis before entering the wave plate).



$F = 2 \cdot 15$

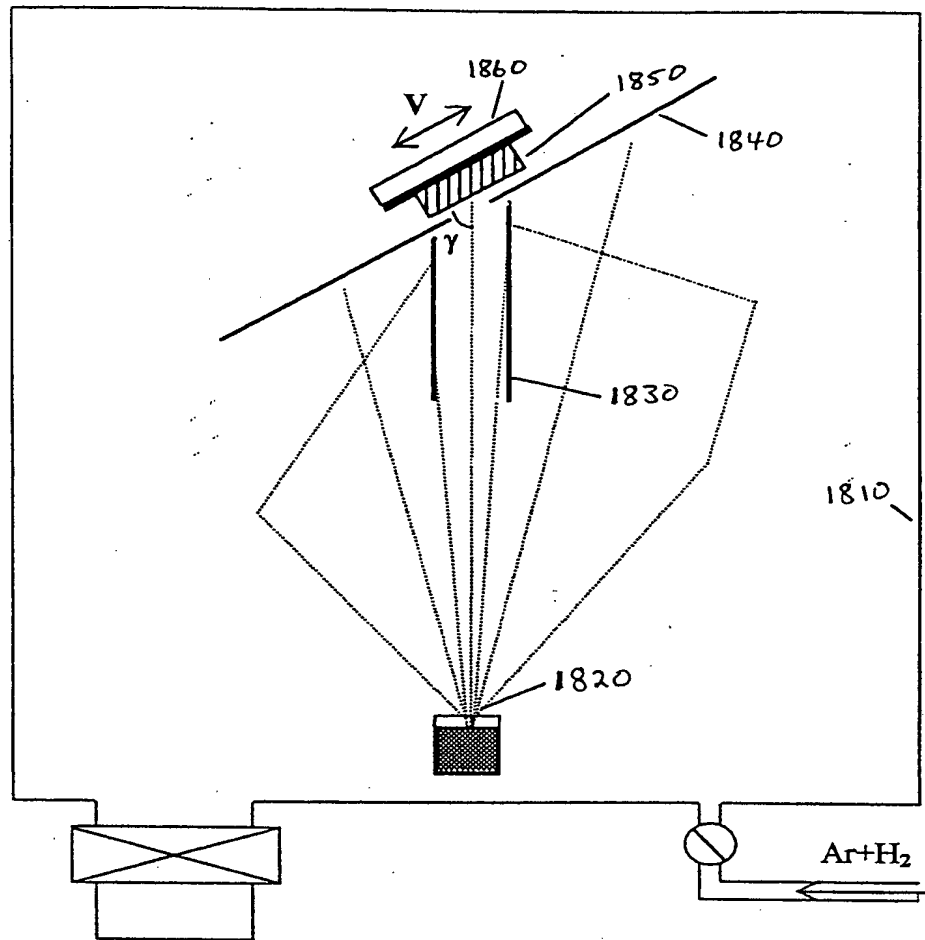


Fig. 16

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Fabrication Process of a Circulator Array

